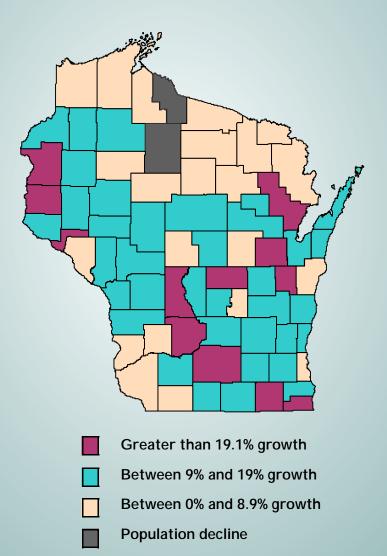
# State of Wisconsin Workforce Profile

Projected population growth from 2000 to 2020



Source: Wisconsin Department of Administration, Demographic Services Center. Statewide population growth is projected to be 13.9 percent from 2000 to 2020.



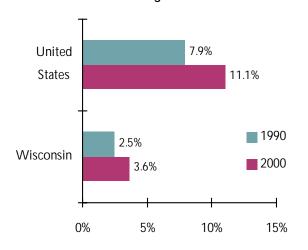
# **State Population**

Wisconsin ranked as the nation's 20<sup>th</sup> most populated state in 2002 as the number of residents approached 5.5 million. At 54,314 square miles, not including inland water, Wisconsin is the 25<sup>th</sup> largest state in the nation by way of geography. Juxtaposing these measurements produces a population density in the Badger State of roughly 100 residents per square mile. Wisconsin's population density is higher than the national average (approximately 87 residents per square mile) and ranks 23<sup>rd</sup> highest in the nation.

In the 20 months since the release of the April 2000 census estimate, Wisconsin gained 90,195 residents, an increase of 1.7 percent, which is slightly slower growth than the national rate of two percent. During this period, three of Wisconsin's ten largest cities, Milwaukee, Racine and West Allis, experienced population losses, while others such as Waukesha and Eau Claire exceeded the national growth rate. Wisconsin's ten most populous cities collectively added close to 12,000 residents, or about 0.8 percent growth. These larger cities, like many cities in other Midwestern states, are not experiencing the same degree of growth as many suburban and rural/non-metropolitan places.

Fifty-five percent of Wisconsin's 90,195 new residents moved into the state, while 45 percent were the result of natural increase (the number of deaths subtracted from the number of births). This 55 percent migration/45 percent natural increase growth ratio is fairly balanced. Wisconsin's balanced growth is very interesting given the fact that a slight majority of national

#### Share of Foreign-born Residents

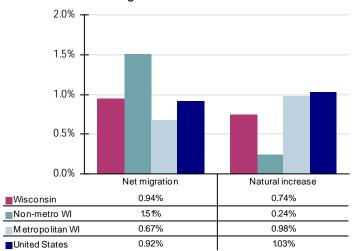


Source: US Dept. of Commerce, Census 2000, Summary file-4, QT-P14

#### **Total Population**

	April 2000	January 1, 2002	Percent
	Census	estimate	change
United States	281,421,906	286,923,000	2.0%
Wisconsin	5,363,701	5,453,896	1.7%
Largest Municipalities			
Milwaukee, City	596,974	595,958	-0.2%
Madison, City	208,054	213,679	0.2%
Green Bay, City	102,779	103,018	0.2%
Kenosha, City	90,352	91,853	1.7%
Racine, City	81,855	81,440	-0.5%
Appleton, City	69,275	70,479	1.7%
Waukesha, City	64,825	66,237	2.2%
Oshkosh, City	62,916	64,132	1.9%
Eau Claire, City	61,704	63,214	2.4%
West Allis, City	61,254	61,114	-0.2%

#### Net migration and natural increase



Source: Wisconsin DOA, Demographic Services Center & US Census Bureau

growth resulted from natural increase. National population dynamics are dictated by the fact that 80 percent of the nation's population inhabits metropolitan areas, where it is typical to see growth from natural increase. In Wisconsin only 68 percent of the population lives in a metropolitan area. These metropolitan areas mirrored national metro growth patterns. The remaining 32 percent of the population lives in non-metropolitan areas of the state and increases in population followed a strikingly different pattern with 86 percent of all new residents from inward migration. The bottom-line is

(Continued on page 2)

#### Wisconsin Workforce Profile

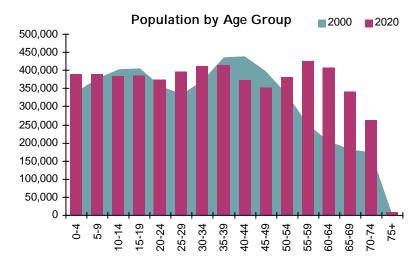
<b>Population</b>	Projections by	Age Groups in	Wisconsin

	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75+
2000																
Male	175,041	194,506	206,665	208,785	182,372	170,011	188,414	217,663	221,424	200,621	168,086	124,363	99,580	85,771	78,610	127,129
Female	167,299	184,978	196,409	198,410	174,920	163,902	183,841	217,592	218,843	197,072	166,527	128,379	105,419	96,348	94,578	220,117
2005																
Male	180,244	182,389	202,415	214,089	205,949	180,422	174,335	194,131	221,472	221,728	198,615	163,158	118,086	90,584	74,401	137,476
Female	172,696	174,541	192,801	203,044	196,025	172,759	166,763	188,173	219,312	218,949	195,127	163,434	123,977	99,541	88,536	228,724
2010																
Male	186,000	185,158	187,966	209,618	211,061	203,278	184,599	179,281	197,222	221,595	219,546	192,992	155,318	107,797	79,055	141,521
Female	178,254	177,686	180,218	199,246	200,538	193,547	175,726	170,659	189,629	219,403	216,806	191,545	157,953	117,146	91,637	229,470
2015																
Male	194,263	190,625	190,370	194,253	206,186	207,679	207,385	189,300	181,608	196,829	219,053	213,107	183,663	141,899	94,332	147,946
Female	186,239	183,032	183,084	185,858	196,367	197,581	196,472	179,475	171,662	189,371	216,889	212,518	184,955	149,162	107,911	232,312
2020																
Male	199,453	198,463	196,018	196,772	191,264	202,919	211,907	212,735	191,862	181,324	194,738	212,955	203,268	168,327	124,779	165,961
Female	191,051	190,729	188,607	188,831	183,196	193,493	200,587	200,713	180,584	171,493	187,299	212,782	205,476	175,025	137,855	250,412
Source: V	Source: Wisconsin Dept. of Administration, Demographic Services, October 2003															

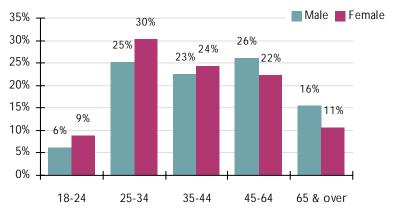
that Wisconsin's non-metropolitan population increased faster (10.4 percent/+163,000 residents) than its metropolitan population (9.3 percent/+309,000 residents) from 1990 to 2000.

While the majority of Wisconsin's inward migration came domestically, there was also an increase in foreign-born residents. Sixty percent the state's 194,000 foreign-born population moved to Wisconsin between 1990 and 2000, and the majority moved in the latter half of the decade. Still, only 3.6 percent of the state's population is foreign-born compared to the national average of 11 percent, but the foreign-born population is increasing slightly faster in Wisconsin (60% increase) than nationally (57% increase).

The graph to the right displays Wisconsin's educational attainment by age and gender. Male higher education attainment exceeds female in ages 45 and older reflecting generations when men outnumbered women in pursuit of post-secondary education. The opposite is true today. Female higher educational attainment exceeds that of males ages 44 and younger. Wisconsin ranks 30<sup>th</sup> in the nation in the percentage of those 25 and older with a bachelor's degree or higher attainment. It ranks 36<sup>th</sup> in percentage of graduate degrees and ranks seventh in associate degreed residents. Overall, Wisconsin is ranked 33<sup>rd</sup> in the nation with 51 percent having attempted or obtained any post-secondary education.



Percent of age group with at least a Bachelor's degree in Wisconsin



Source: US Dept. of Commerce, Census 2000, Summary file 4, QT-P20

#### **Labor Force Characteristics**

A discussion of labor force characteristics and changes begins with an examination of population demographics. Why? Because the future of Wisconsin's labor force, its employed and unemployed, will likely be more strongly associated with demographic changes than with anything economic.

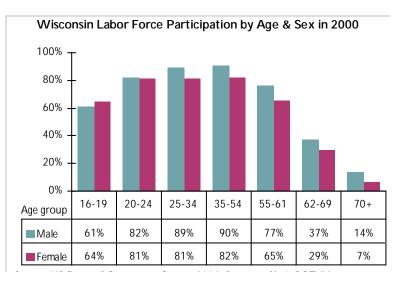
The 'population by age group' graph (middle of page 2) shows the projected population changes by age group comparing 2000 to 2020. The total population is projected to add 750,000 residents over this 20-year period, about a 14 percent increase. In broader terms the population under 30 years of age will increase four percent; those between 30 and 59 years old will increase about six percent, and the number of residents 60 years and older will increase 58 percent. In other words, the share of population under the age of 30, who comprised 41 percent of total population in 2000, will decline to 38 percent by 2020; the share of population 30 to 59 years old will drop from 42 to 39 percent; and those 60 years and older will increase from 17 percent of the population in 2000 to 23 percent of the population in 2020.

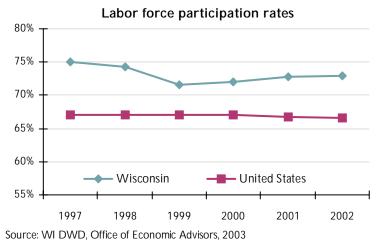
The labor force participation rate (LFPR) is the percentage of those 16 years and older whom are working or actively looking for work. Wisconsin, with a 73.0 LFPR in 2002, boasts one of the highest participation rates in the nation and ranked fifth highest among the fifty states. Wisconsin's rate is considerably higher than the 66.6 percent LFPR of the U.S and has been higher than national average for many years. But like the U.S., will likely see a decline in LFPR as the population ages.

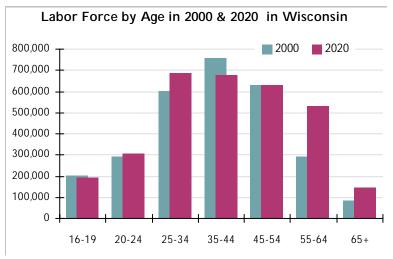
Wisconsin's 73 percent LFPR implies that 27 percent of those over the age of 16 years are not in the labor force. This is not to be confused with the unemployment rate, which is a measurement of only those who participate in the labor force by looking for work. The majority of the 27 percent who do not participate in working or looking for work are willing non-participants, whom are likely older, retired or have no financial incentive to participate in the job market. A smaller share of non-participants are likely "marginally attached" and are not included in unemployment estimates because they may have stopped looking for work.

The graph on the right uses current LFPR by age group with the population projections to 2020 to get a glimpse of the future labor supply. These projections

(Continued on page 4)





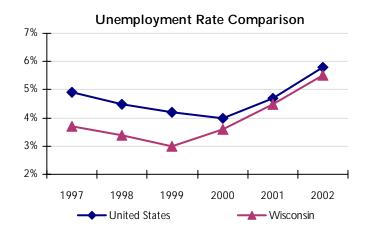


Source: DWD, Office of Economic Advisors, US Census, SF-4 (PCT-79), WI Demographic Services

#### Wisconsin Workforce Profile

assume that current LFPR will continue into 2020, an assumption that is both optimistic and unlikely. That said, the state's labor force is projected to expand 11 percent as the population 16 years and older increases 17 percent. In the last 20-year period the state's labor force increased 27 percent.

The primary reason for slower labor force growth is demographic. The lower participation rates from older residents will become increasingly more apparent as a greater number of residents enter those age groups. Thought the share of total labor force participants 55 years and older will increase from 13 percent in 2000 to 22 percent by 2020 even with their lower participation rates. This will likely affect the number of workers in key occupations and industries; some that are typically filled by younger workers.



#### Wisconsin Civilian Labor Force Data

	1997	1998	1999	2000	2001	2002
Labor Force	2,948,673	2,951,967	2,889,812	2,968,102	3,028,154	3,027,589
Employed	2,840,345	2,852,556	2,801,777	2,862,683	2,891,294	2,860,916
Unemployed	108,328	99,411	88,035	105,419	136,860	166,673
Unemployment Rate	3.7%	3.4%	3.0%	3.6%	4.5%	5.5%

Source: WI DWD, Bureau of Workforce Information, LAUS program, 2003

# Occupations in demand

The table to the right displays Wisconsin's top ten fastest growing occupations and top ten occupations with the most openings. These tables are based on annual average employment from 2000 projected to 2010.

The fastest growing occupations are those that show the largest proportional growth in job creation as opposed to volume growth. Occupations with the most openings are simply those with high numbers of jobs, whether these jobs were created by increased economic demand or from vacancies when a worker leaves the occupation.

It should be noted that the fastest growing occupations seldom generate a large number of jobs. The fastest growing occupations in Wisconsin are rooted in information technology and health care, which typically have higher educational requirements and are compensated accordingly. Occupations with the most openings are for the most part entry-level with minimal education and training required with the exception of registered nurses.

More in-demand data projected by DWD can be found at http://www.dwd.state.wi.us/lmi/projections.htm

Wisconsin Occupation Projections: 20	)10
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		Education &	Average
	Top Ten Occupations	Typically Required*	Wage**
	Comp., Software Engineers, Systems	Bachelor's degree	\$60,290
	Computer Support Specialists	Associate degree	\$39,840
‡	Comp. Software Engineers, Applications	Bachelor's degree	\$62,790
ŅO	Network/Comp. Systems Administrators	Bachelor's degree	\$48,940
Growth	Desktop Publishers	Postsecondary voc. trng.	\$33,270
	Medical Records/Hlth Info. Technicians	Associate degree	\$24,060
Fastest	Network Systems/Data Comm. Analysts	Bachelor's degree	\$47,950
Fa	Personal/Home Care Aides	1-month or less training	\$18,060
	Medical Assistants	1-12 mo. on-the-job	\$25,050
	Physician Assistants	Bachelor's degree	\$70,950
	Retail Salespersons	1-month or less training	\$20,450
	Cashiers	1-month or less training	\$15,780
gs	Combined Food Prep/Serving Workers	1-month or less training	\$15,730
Openings	Waiters/Waitresses	1-month or less training	\$14,230
per	Registered Nurses	Bachelor's degree	\$46,750
0	Laborers/Frght/Stock/Mat. Movers, Hand	1-month or less training	\$21,850
Most	Office Clerks/General	1-month or less training	\$22,560
Σ	Janitors/Cleaners Except	1-month or less training	\$20,140
	Stock Clerks/Order Fillers	1-month or less training	\$20,730
	Customer Service Representatives	1-12 mo. on-the-job	\$28,310

<sup>\*</sup> The most common way to enter the occupation, not the only way

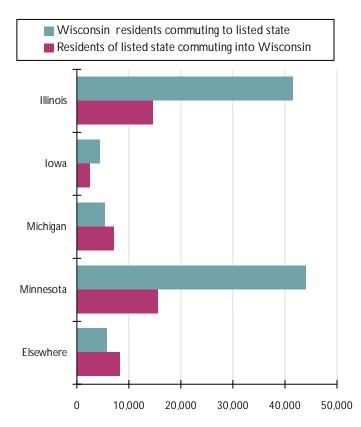
Source: WI DWD, Bureau of Workforce Information, 2002

<sup>\*\*</sup> Wages from Occupation Employment Statistics survey responses for state, 2001

### **State Commuting Patterns**

Commuting patterns data supplied in this profile juxtapose two questions: where do you live? and where do you work?

Commuting data is powerful information because it is descriptive. It is more than quantifying how many people travel in or out of a location or listing popular modes of transportation. Not that those are not important, but the commuting exchange reflects the fun-



damental economic principles of supply (workers), demand (jobs) and opportunity (geographic wage premiums).

Seventy-four percent of Wisconsin's 2,691,000 employed residents (U.S. Census, April 2000) work in the county where they reside. Roughly 600,000 or 22 percent work in a Wisconsin county other than the one in which they reside. The remaining four percent or

101,000 employed residents work in another state. The graph to the left shows that inter-state commuting is heavily weighted towards a net loss of workers into the bordering states of Minnesota and Illinois. In fact, Michigan is the only state in which Wisconsin shows a positive net commute. Overall Wisconsin sends 101,000 workers out of state and attracts about 48,000 into the state for an overall net commute of about -53,000 workers.

Why this net loss? For Wisconsin residents who live in counties that border Minnesota and Illinois the career opportunities and higher wages found in the Twin Cities (Minneapolis - St. Paul) and Chicago are very enticing. It is also no coincidence that the fastest growing counties in Wisconsin border these states. Many Illinois and Minnesota residents are choosing Wisconsin as their home while keeping the higher paying jobs from their previous home states. Many of these rapidly growing border counties have more employed residents than jobs available in them making commuting a necessity. An example of commuting impact is that 47 percent of St. Croix County's total net earnings came from outside of the county in 2001; the majority presumably from the Twin Cities.

	Wisconsin residents	Residents of listed	Net gain or
	commuting to listed	state commuting into	loss of
	state	Wisconsin	workers
Illinois	41,611	14,540	-27,071
lowa	4,333	2,441	-1,892
Michigan	5,458	7,070	1,612
Minnesota	44,096	15,517	-28,579
Elsewhere	5,865	8,237	2,372



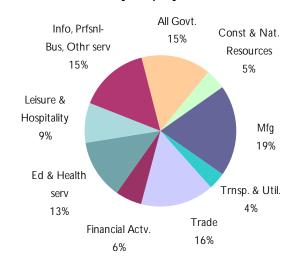
Source: US Dept. of Commerce, Census 2000, County-to-county worker-flow files

# Industry Employment Introducing NAICS (North American Industry Classification System)

In 2003 the industry coding system for employers, used to publish employment estimates, changed from the Standard Industrial Classification (SIC) to the North American Industry Classification System (NAICS). The transition from SIC, used for the last seventy years, to NAICS began in 1997 with the last Economic Census. However, the monthly Current Employment Statistics program, responsible for the monthly nonfarm wage and salary employment estimates for counties, initiated the change to NAICS with the revision of 2002 estimates.

Because NAICS is so different, retroactive revision to earlier years' estimates is difficult and are not available

#### Wisconsin Industry Employment Distribution: 2002



for small-county estimates. Even though historical estimates are available for state and metropolitan areas back to 1990 they were not used in this publication.

New industry classifications abound in NAICS that did not exist in SIC. Good examples of this are the new industry sectors for leisure and hospitality, and information. Previously, employment in leisure and hospitality was included in retail trade (restaurants) and in services (hotels and resorts). Many information jobs were in manufacturing (printing and publishing). Logging jobs have also been reassigned from manufacturing to natural resources.

The pie graph to the left shows Wisconsin's employment distribution in 2002 by industry super-sectors, the same used in the county profiles. Wisconsin has proportionally average employment in most sectors compared to national averages. Exceptions to this are the information, professional, business and other services sector (-4.0 percentage points); the government sector (-2.0 percentage points); and the construction, mining and natural resources sector (-1.0 percentage points). With 19 percent of employment in manufacturing, Wisconsin is 7.0 percentage points higher than the national average, which compensates for the state's proportionally lower sectors. Wisconsin's percentage of manufacturing employment is so disproportionately high, despite the recent downturn in this sector, that it ranks as the second highest percentage of total employment in the country behind Indiana.

(Continued on page 7)

#### 2002 Industry Employment in Wisconsin: a comparison of two classification systems

	Employ-	Distri-		Distri-
NAICS Super-sectors	ment	bution	SIC Industry Divisions	bution
Construction, natural resources & mining	127,000	5%	Construction & Mining	4%
Manufacturing	528,700	19%	Manufacturing	20%
Transportation, warehousing & utilities	104,400	4%	Transportation, utilities & communication	5%
Trade (wholesale & retail)	430,700	16%	Wholesale trade	5%
			Retail trade	18%
Financial activities	153,200	6%	Finance, insurance & real estate	5%
Information, professional & business services,				
other services	424,100	15%	Services & misc (incl. agr, forestry, fishing)	28%
Education and health services	356,800	13%	Government	15%
Leisure & hospitality	238,800	9%		
Government	414,500	15%		

Source: WI DWD, Bureau of Workforce Information, Current Employment Statistics Program, March 2003, figures are rounded

#### Wisconsin Workforce Profile

In spite of this prominence only one manufacturing industry, machinery manufacturing, is included on the list of the top ten industries in the state. These lists are dominated by services-providing industries such as those from healthcare, education and professional and technical services. The list of top employers includes only those from the services-providing sectors.

Including government-owned institutions, education and health services is the largest employing sector in the

state with manufacturing employing slightly fewer. Among only private-sector firms manufacturing is the largest employing sector in Wisconsin.

The pie graph on the previous page allocates all government-owned industry employment to the "all government" sector while the lists on this page and the tables on page 8 distributes government employment to the industry where the work is performed, i.e. public school workers are assigned to education.

Top 10 Industry Groups in Wisconsin

	Marc	ch 2003	Numeric change
Industry Group	Employers	Employees	2002 - 2003
Educational Services	1,233	220,476	749
Food Services and Drinking Places	8,365	171,989	1,784
Hospitals	*	*	*
Administrative and Support Services	4,407	106,070	-330
Ambulatory Health Care Services	5,639	97,438	2,937
Executive, Legislative, & Gen Government	1,809	92,952	-1,024
Professional and Technical Services	9,332	91,011	-23
Nursing and Residential Care Facilities	*	*	*
Machinery Manufacturing	1,209	69,663	-5,115
Specialty Trade Contractors	8,698	69,593	-976

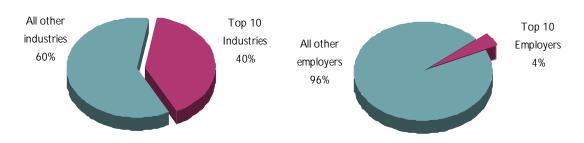
<sup>\*</sup>data surpressed to maintain confidentiality

#### Top 10 Private and Public Employers in Wisconsin **Product or Service** Size Company Wal-Mart Associates, Inc. Warehouse clubs and supercenters 1000 + Milwaukee Public Schools Elementary & secondary schools 1000 +U.W.-Madison Colleges, universities, and professional schools 1000 + Department of Corrections Correctional institutions 1000 + City of Milwaukee Executive & legislative offices, combined 1000 +Kohl's Department Stores, Inc. Discount department stores 1000 +Kohler Co. Enameled iron and metal sanitary ware manufacturing 1000 +Lands' End, Inc. Mail order houses 1000 + Department of Health & Family Services Administration of public health programs 1000 +

#### Share of jobs with top 10 industries

Walgreen Co. Illinois

#### Share of jobs with top 10 employers



Pharmacies and drug stores

Source: WI DWD, Bureau of Workforce Information, ES-202 special report, First quarter, 2003

1000 +

Wisconsin's average annual wage, overall, is \$32,464 or about 12 percent lower than the U.S. average. Wisconsin's average wage ranks 30<sup>th</sup> nationally, below Illinois (\$39,688), Michigan (\$38,135) and Minnesota (\$37,458), but higher than lowa (\$29,668). For the most part, the table on the right compares average annual wage data from privately-owned industries in Wisconsin and the United States. The two exceptions are Private education and health and Public Administration.

The graph below shows the relative importance of industry employment by NAICS super-sector in Wisconsin compared to total payroll in each sector. Notice that manufacturing employers have a higher percentage of the total pay-

roll in the state than employment placing a premium on this industry's employment in Wisconsin's economy. The same can be said for other sectors such as education and health services, financial activities and professional and business services. Employment with leisure and hospitality em-

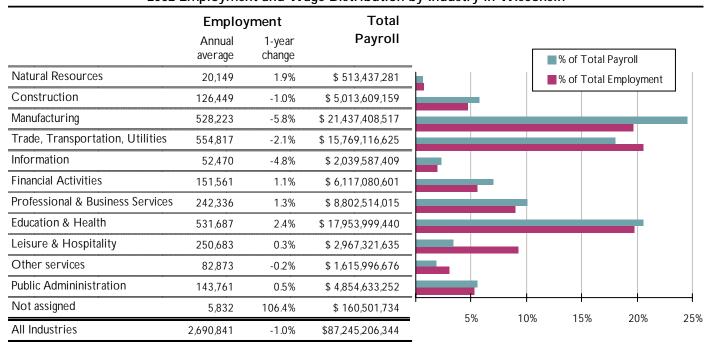
#### Average Annual Wage by Industry Division in 2002

			WI as a	One-year
	Average A	Annual Wage*	percent of	change in
	Wisconsin	<b>United States</b>	U.S. wages	WI wages
All Industries	\$ 32,464	\$ 36,764	88%	2.9%
Natural resources	\$ 25,452	\$ 32,917	77%	2.8%
Construction	\$ 39,679	\$ 39,027	102%	1.3%
Manufacturing	\$ 40,606	\$ 44,097	92%	3.5%
Trade, Transportation, Utilities	\$ 28,015	\$ 32,212	87%	1.9%
Information	\$ 38,930	\$ 56,103	69%	2.3%
Financial activities	\$ 40,464	\$ 55,172	73%	3.4%
Professional & Business Services	\$ 36,394	\$ 43,899	83%	5.6%
Private Education & Health	\$ 33,088	\$ 33,931	98%	5.2%
Public Education & Health	\$ 35,350	\$ 34,770	102%	2.1%
Leisure & Hospitality	\$ 11,451	\$ 15,777	73%	2.6%
Other services	\$ 19,438	\$ 23,784	82%	1.3%
Public Admininistration	\$ 33,790	\$ 41,663	81%	2.5%

Source: WI DWD, Office of Economic Advisors and U.S. Dept. of Labor, BLS, Covered Employment and Wage \*Wage data are for privately owned establishments except for Public Ed. & Health and Public Administration. 'All industries' data includes private and public ownership

ployers is a higher percentage than total payroll due to a great deal of seasonal and part-time employment as well as the prevalence of entry-level occupations. "Not assigned" industry employment was not shown in the distribution due to its small presence.

#### 2002 Employment and Wage Distribution by Industry in Wisconsin



Source: WI DWD, Office of Economic Advisors and U.S. Dept. of Labor, BLS Covered Employment and Wages, January 2004

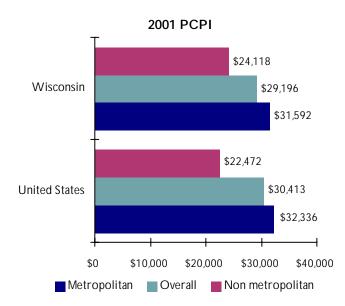
# Per Capita Personal Income (PCPI)

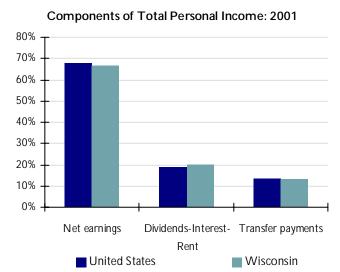
PCPI is total personal income divided by the total population. Personal income is broadly composed of net earnings from job wages, self-employment wages, dividends and interest from investments, and transfer payments from the government such as social security. Wisconsin's PCPI ranks 21<sup>st</sup> in the United States, and like average annual wages, trails Minnesota, Illinois and Michigan but exceeds lowa. Since 1965, Wisconsin's PCPI has, for the most part, averaged about 97 percent of the national average PCPI, but exceeded the national average in two years, 1978 and 1979.

Wisconsin's PCPI growth has matched the U.S. growth rate over the last five years and exceeded the PCPI growth of Illinois, Iowa and Michigan. It trailed Minnesota's growth by a few percentage points. PCPI is affected by many variables including the amount of wages and earnings, labor force participation rate, age demographics (read: non-working children or retirees), and population change. The overall composition of personal income is important (graph below, right) because these components have changed differently in Wisconsin and can compose more or less of total personal income from year to year.

#### Per Capita Personal Income

							Percent	Change
	1996	1997	1998	1999	2000	2001	1 year	5 year
United States	\$24,270	\$25,412	\$26,893	\$27,880	\$29,760	\$30,413	2.2%	25.3%
Wisconsin	\$23,301	\$24,481	\$26,004	\$26,926	\$28,389	\$29,196	2.8%	25.3%





Doroont Change

Source: US Dept. of Commerce, Bureau of Economic Analysis, State & Local Personal Income, May 2003, CA1-3, CA05

#### WWW addresses of source data

Wisconsin population estimates and projections:

Education levels of population, labor force participation rates, commuting patterns:

Labor force estimates (employed and unemployed), industry employment, average annual wages:

Occupations in-demand:

Per Capita Personal Income:

Profile author: Eric Grosso (608) 266-7034

http://www.doa.state.wi.us/dir/index.asp

http://www.census.gov/main/www/cen2000.html

http://www.dwd.state.wi.us/lmi/

http://www.dwd.state.wi.us/lmi/wda\_map.htm http://www.bea.gov/bea/regional/reis

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